

WEST Search History

DATE: Tuesday, April 25, 2006

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		<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>	
<input type="checkbox"/>	L1	polypeptide near5 complex	14294
<input type="checkbox"/>	L2	L1.ti,ab,clm.	3461
<input type="checkbox"/>	L3	L2 same (solid or immobilized or surface or bead or chip or sensor).ti,ab,clm.	173

END OF SEARCH HISTORY

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asset*

*FAK
CAK
RICK
REK*

DERWENT-ACC-NO: 2000-665270
DERWENT-WEEK: 200551
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TITLE: Identifying a class II major histocompatibility complex-binding fragment of a polypeptide useful for diagnosing and protecting against diabetes comprises contacting a ligand, a polypeptide and a mammalian antigen presenting cell

Basic Abstract Text (1):

NOVELTY - Identifying (M1) a class II major histocompatibility complex (MHC)-binding fragment of a polypeptide comprises contacting a ligand, a polypeptide and a mammalian antigen presenting cell (APC) expressing a class II MHC molecule and a cell surface receptor which binds the ligand and isolating from the APC a class II MHC molecule bound to a peptide.

Basic Abstract Text (6):

(d) contacting the APC with the biotin conjugated ligand of (a), the biotin conjugated polypeptide of (b) and avidin, to form a complex which binds to the cell surface receptor;

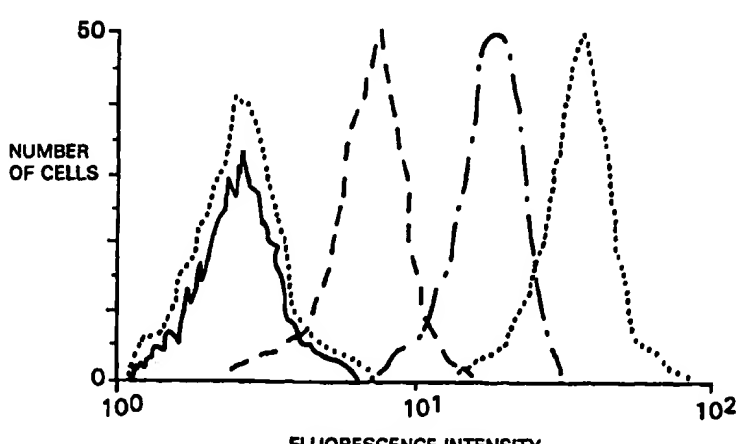
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PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : G01N 33/68	A1	(11) International Publication Number: WO 00/63702 (43) International Publication Date: 26 October 2000 (26.10.00)
(21) International Application Number: PCT/US00/10888 (22) International Filing Date: 20 April 2000 (20.04.00) (30) Priority Data: 09/295,868 21 April 1999 (21.04.99) US 60/130,355 21 April 1999 (21.04.99) US (63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Applications US 09/295,868 (CIP) Filed on 21 April 1999 (21.04.99) US 60/130,355 (CIP) Filed on 21 April 1999 (21.04.99) (71) Applicants (for all designated States except US): ZYCOS INC. [US/US]; 763 East Concord Avenue, Cambridge, MA 02138 (US). KING'S COLLEGE LONDON [GB/GB]; Strand, London WC2R 2LS (GB). (72) Inventors; and (75) Inventors/Applicants (for US only): PEAKMAN, Mark [GB/GB]; 12 Beckwith Road, London SE24 9LG (GB). CHICZ, Roman, M. [US/US]; 4 Cottage Street, Belmont, MA 02478 (US).		(74) Agent: FRASER, Janis, K.; Fish & Richardson P.C., 225 Franklin Street, Boston, MA 02110-2804 (US). (81) Designated States: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: PEPTIDE EPITOPES RECOGNIZED BY DISEASE PROMOTING CD4+ T LYMPHOCYTES  (57) Abstract <p>The invention provides methods for identifying peptide epitopes that activate CD4+ T cells involved in the pathogenesis of diseases, e.g., autoimmune diseases, susceptibility to which is determined by expression of particular class II MHC genes. The invention includes peptides derived from the IA-2 polypeptide by such a method, altered peptide ligands, and methods of therapy involving the use of altered peptide ligands.</p>		

DERWENT-ACC-NO: 1997-165442
 DERWENT-WEEK: 200270
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TITLE: New dendrimer-polypeptide complexes - useful in assays, as industrial bio-reactor(s), as biological standards and as affinity chromatography media

INVENTOR: SINGH, P; LIN, S ; MOLL, F

PATENT-ASSIGNEE: DADE INT INC (DADEN), DADE BEHRING INC (DADEN)

PRIORITY-DATA: 1995US-0514075 (August 11, 1995)

Search Selected

Search ALL

Clear

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> <u>ES 2171705 T3</u>	September 16, 2002		000	G01N033/545
<input type="checkbox"/> <u>WO 9707398 A1</u>	February 27, 1997	E	064	G01N033/545
<input type="checkbox"/> <u>AU 9667227 A</u>	March 12, 1997		000	G01N033/545
<input type="checkbox"/> <u>EP 786087 A1</u>	July 30, 1997	E	000	G01N033/545
<input type="checkbox"/> <u>JP 10507778 W</u>	July 28, 1998		057	C07K017/08
<input type="checkbox"/> <u>US 6083708 A</u>	July 4, 2000		000	G01N033/535
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<input type="checkbox"/> <u>DE 69619493 E</u>	April 4, 2002		000	G01N033/545

DESIGNATED-STATES: AU CA JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
 AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE AT BE CH DE DK ES FI FR GB GR
 IE IT LI LU MC NL PT SE

CITED-DOCUMENTS:2.Jnl.Ref; WO 8801178 ; WO 9419693 ; WO 9527902 ; WO 9528641

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
ES 2171705T3	August 9, 1996	1996EP-0927393	
ES 2171705T3		EP 786087	Based on
WO 9707398A1	August 9, 1996	1996WO-US13057	
AU 9667227A	August 9, 1996	1996AU-0067227	
AU 9667227A		WO 9707398	Based on
EP 786087A1	August 9, 1996	1996EP-0927393	
EP 786087A1	August 9, 1996	1996WO-US13057	
EP 786087A1		WO 9707398	Based on
JP 10507778W	August 9, 1996	1996WO-US13057	

JP 10507778W	August 9, 1996	1997JP-0509402	
JP 10507778W		WO 9707398	Based on
US 6083708A	August 11, 1995	1995US-0514075	
EP 786087B1	August 9, 1996	1996EP-0927393	
EP 786087B1	August 9, 1996	1996WO-US13057	
EP 786087B1		WO 9707398	Based on
DE 69619493E	August 9, 1996	1996DE-0619493	
DE 69619493E	August 9, 1996	1996EP-0927393	
DE 69619493E	August 9, 1996	1996WO-US13057	
DE 69619493E		EP 786087	Based on
DE 69619493E		WO 9707398	Based on

INT-CL (IPC): C07 K 16/26; C07 K 17/08; C12 Q 1/26; C12 Q 1/34; G01 N 33/535; G01 N 33/543; G01 N 33/545

ABSTRACTED-PUB-NO: EP 786087B
BASIC-ABSTRACT:

Dendrimer-polypeptide complex comprises a dendrimer having termini and being sequentially coupled via at least 1 of the termini to a first polypeptide and via at least a different terminus to a second polypeptide, the first and second polypeptides of the complex exhibiting first and second defined biological activities resp. Also claimed are: (1) a dendrimer-polypeptide complex which comprises a dendrimer coupled to a first polypeptide exhibiting a first defined biological activity, the dendrimer having at least 1 activated terminus effective for subsequently coupling a second polypeptide possessing a second defined biological activity, where the first and second polypeptides exhibit the respective defined biological activities following the subsequent coupling; (2) a method for conducting a specific binding assay to determine the concn. or presence of an analyte in a sample, which comprises: (a) immobilising a specific binding assay reagent with specificity for the analyte (or for a receptor of the analyte) to a solid phase; (b) applying the sample under binding conditions to the solid phase; (c) applying an indicator comprising a dendrimer having termini, coupled via at least a first terminus to a first polypeptide and via at least a second terminus to a second polypeptide, 1 of the polypeptides comprising a label and the other polypeptide comprising a specific binding receptor for the analyte (or for a receptor of the analyte); (d) determining the amt. of the dendrimer-polypeptide indicator bound to the solid phase, and (e) correlating the amt. of the indicator with the concn. or presence of the analyte (or receptor) in the sample; (3) a method for conducting a specific binding assay to determine the concn. or presence of an analyte in a sample, which comprises: (a) providing a reagent soln. comprising a specific binding assay reagent with specificity for the analyte (or for a receptor); (b) adding the sample under specific binding conditions to the reagent soln. to form an assay soln.; (c) adding the assay soln. to a solid phase under conditions effecting immobilisation of reagent on a delimited area of the solid phase; (d) applying to the delimited area an indicator comprising a dendrimer having termini and coupled via at least a first terminus to a first polypeptide and via at least a second terminus to a second polypeptide, 1 of the polypeptides comprising a label and the other comprising a specific binding receptor for the analyte (or a receptor); (e) determining the amt. of the dendrimer polypeptide indicator bound to the solid phase, and (f) correlating the amt. of the indicator with the concn. or presence of the analyte (or receptor) in the sample, and (4) a method of making a dendrimer/polypeptide complex.

USE - The dendrimer-polypeptide compsns. can be used in assays, as industrial bioreactors, as biological standards or as affinity chromatography media.

ADVANTAGE - Using the dendrimers, 2 different polypeptides, having separate and distinct biological activities, can be sequentially coupled to the same dendrimer such that the polypeptide:dendrimer ratio for each polypeptide in a compsn. is readily controlled and the native biological activity of each polypeptide is retained. The prods. have uniform compsns.

ABSTRACTED-PUB-NO: US 6083708A
EQUIVALENT-ABSTRACTS:

Dendrimer-polypeptide complex comprises a dendrimer having termini and being sequentially coupled via at least 1 of the termini to a first polypeptide and via at least a different terminus to a second polypeptide, the first and second polypeptides of the complex exhibiting first and second defined biological activities resp. Also claimed are:(1) a dendrimer-polypeptide complex which comprises a dendrimer coupled to a first polypeptide exhibiting a first defined biological activity, the dendrimer having at least 1 activated terminus effective for subsequently coupling a second polypeptide possessing a second defined biological activity, where the first and second polypeptides exhibit the respective defined biological activities following the subsequent coupling;(2) a method for conducting a specific binding assay to determine the concn. or presence of an analyte in a sample, which comprises: (a) immobilising a specific binding assay reagent with specificity for the analyte (or for a receptor of the analyte) to a solid phase; (b) applying the sample under binding conditions to the solid phase; (c) applying an indicator comprising a dendrimer having termini, coupled via at least a first terminus to a first polypeptide and via at least a second terminus to a second polypeptide, 1 of the polypeptides comprising a label and the other polypeptide comprising a specific binding receptor for the analyte (or for a receptor of the analyte); (d) determining the amt. of the dendrimer-polypeptide indicator bound to the solid phase, and (e) correlating the amt. of the indicator with the concn. or presence of the analyte (or receptor) in the sample;(3) a method for conducting a specific binding assay to determine the concn. or presence of an analyte in a sample, which comprises: (a) providing a reagent soln. comprising a specific binding assay reagent with specificity for the analyte (or for a receptor); (b) adding the sample under specific binding conditions to the reagent soln. to form an assay soln.; (c) adding the assay soln. to a solid phase under conditions effecting immobilisation of reagent on a delimited area of the solid phase; (d) applying to the delimited area an indicator comprising a dendrimer having termini and coupled via at least a first terminus to a first polypeptide and via at least a second terminus to a second polypeptide, 1 of the polypeptides comprising a label and the other comprising a specific binding receptor for the analyte (or a receptor); (e) determining the amt. of the dendrimer polypeptide indicator bound to the solid phase, and (f) correlating the amt. of the indicator with the concn. or presence of the analyte (or receptor) in the sample, and(4) a method of making a dendrimer/polypeptide complex.

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WO 9707398A

CHOSEN-DRAWING: Dwg.0/5

DERWENT-CLASS: B04 D16 J04 S03

CPI-CODES: B04-C01; B04-N02; B12-K04A; D05-H09; J04-B01B;

EPI-CODES: S03-E14H4;

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DERWENT-ACC-NO: 1997-165442

DERWENT-WEEK: 200270

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TITLE: New dendrimer-polypeptide complexes - useful in assays, as industrial bio-reactor(s), as biological standards and as affinity chromatography media

Basic Abstract Text (1):

Dendrimer-polypeptide complex comprises a dendrimer having termini and being sequentially coupled via at least 1 of the termini to a first polypeptide and via at least a different terminus to a second polypeptide, the first and second polypeptides of the complex exhibiting first and second defined biological activities resp. Also claimed are: (1) a dendrimer-polypeptide complex which comprises a dendrimer coupled to a first polypeptide exhibiting a first defined biological activity, the dendrimer having at least 1 activated terminus effective for subsequently coupling a second polypeptide possessing a second defined biological activity, where the first and second polypeptides exhibit the respective defined biological activities following the subsequent coupling; (2) a method for conducting a specific binding assay to determine the concn. or presence of an analyte in a sample, which comprises: (a) immobilising a specific binding assay reagent with specificity for the analyte (or for a receptor of the analyte) to a solid phase; (b) applying the sample under binding conditions to the solid phase; (c) applying an indicator comprising a dendrimer having termini, coupled via at least a first terminus to a first polypeptide and via at least a second terminus to a second polypeptide, 1 of the polypeptides comprising a label and the other polypeptide comprising a specific binding receptor for the analyte (or for a receptor of the analyte); (d) determining the amt. of the dendrimer-polypeptide indicator bound to the solid phase, and (e) correlating the amt. of the indicator with the concn. or presence of the analyte (or receptor) in the sample; (3) a method for conducting a specific binding assay to determine the concn. or presence of an analyte in a sample, which comprises: (a) providing a reagent soln. comprising a specific binding assay reagent with specificity for the analyte (or for a receptor); (b) adding the sample under specific binding conditions to the reagent soln. to form an assay soln.; (c) adding the assay soln. to a solid phase under conditions effecting immobilisation of reagent on a delimited area of the solid phase; (d) applying to the delimited area an indicator comprising a dendrimer having termini and coupled via at least a first terminus to a first polypeptide and via at least a second terminus to a second polypeptide, 1 of the polypeptides comprising a label and the other comprising a specific binding receptor for the analyte (or a receptor); (e) determining the amt. of the dendrimer polypeptide indicator bound to the solid phase, and (f) correlating the amt. of the indicator with the concn. or presence of the analyte (or receptor) in the sample, and (4) a method of making a dendrimer/polypeptide complex.

Equivalent Abstract Text (1):

Dendrimer-polypeptide complex comprises a dendrimer having termini and being sequentially coupled via at least 1 of the termini to a first polypeptide and via at least a different terminus to a second polypeptide, the first and second polypeptides of the complex exhibiting first and second defined biological activities resp. Also claimed are: (1) a dendrimer-polypeptide complex which comprises a dendrimer coupled to a first polypeptide exhibiting a first defined biological activity, the dendrimer having at least 1 activated terminus effective for subsequently coupling a second polypeptide possessing a second defined biological activity, where the first and second polypeptides exhibit the respective defined biological activities following the subsequent coupling; (2) a method for conducting a specific binding assay to determine the concn. or presence of an analyte in a sample, which comprises: (a) immobilising a specific binding assay reagent with specificity for the analyte (or for a receptor of the analyte) to a solid phase; (b) applying the sample under binding conditions to the solid phase; (c) applying an indicator comprising a dendrimer having termini, coupled via at least a first terminus to a first polypeptide and via at least a second terminus to a second polypeptide, 1 of the polypeptides

comprising a label and the other polypeptide comprising a specific binding receptor for the analyte (or for a receptor of the analyte); (d) determining the amt. of the dendrimer-polypeptide indicator bound to the solid phase, and (e) correlating the amt. of the indicator with the concn. or presence of the analyte (or receptor) in the sample;(3) a method for conducting a specific binding assay to determine the concn. or presence of an analyte in a sample, which comprises: (a) providing a reagent soln. comprising a specific binding assay reagent with specificity for the analyte (or for a receptor); (b) adding the sample under specific binding conditions to the reagent soln. to form an assay soln.; (c) adding the assay soln. to a solid phase under conditions effecting immobilisation of reagent on a delimited area of the solid phase; (d) applying to the delimited area an indicator comprising a dendrimer having termini and coupled via at least a first terminus to a first polypeptide and via at least a second terminus to a second polypeptide, 1 of the polypeptides comprising a label and the other comprising a specific binding receptor for the analyte (or a receptor); (e) determining the amt. of the dendrimer polypeptide indicator bound to the solid phase, and (f) correlating the amt. of the indicator with the concn. or presence of the analyte (or receptor) in the sample, and(4) a method of making a dendrimer/polypeptide complex.

Equivalent Abstract Text (4):

Dendrimer-polypeptide complex comprises a dendrimer having termini and being sequentially coupled via at least 1 of the termini to a first polypeptide and via at least a different terminus to a second polypeptide, the first and second polypeptides of the complex exhibiting first and second defined biological activities resp. Also claimed are:(1) a dendrimer-polypeptide complex which comprises a dendrimer coupled to a first polypeptide exhibiting a first defined biological activity, the dendrimer having at least 1 activated terminus effective for subsequently coupling a second polypeptide possessing a second defined biological activity, where the first and second polypeptides exhibit the respective defined biological activities following the subsequent coupling;(2) a method for conducting a specific binding assay to determine the concn. or presence of an analyte in a sample, which comprises: (a) immobilising a specific binding assay reagent with specificity for the analyte (or for a receptor of the analyte) to a solid phase; (b) applying the sample under binding conditions to the solid phase; (c) applying an indicator comprising a dendrimer having termini, coupled via at least a first terminus to a first polypeptide and via at least a second terminus to a second polypeptide, 1 of the polypeptides comprising a label and the other polypeptide comprising a specific binding receptor for the analyte (or for a receptor of the analyte); (d) determining the amt. of the dendrimer-polypeptide indicator bound to the solid phase, and (e) correlating the amt. of the indicator with the concn. or presence of the analyte (or receptor) in the sample;(3) a method for conducting a specific binding assay to determine the concn. or presence of an analyte in a sample, which comprises: (a) providing a reagent soln. comprising a specific binding assay reagent with specificity for the analyte (or for a receptor); (b) adding the sample under specific binding conditions to the reagent soln. to form an assay soln.; (c) adding the assay soln. to a solid phase under conditions effecting immobilisation of reagent on a delimited area of the solid phase; (d) applying to the delimited area an indicator comprising a dendrimer having termini and coupled via at least a first terminus to a first polypeptide and via at least a second terminus to a second polypeptide, 1 of the polypeptides comprising a label and the other comprising a specific binding receptor for the analyte (or a receptor); (e) determining the amt. of the dendrimer polypeptide indicator bound to the solid phase, and (f) correlating the amt. of the indicator with the concn. or presence of the analyte (or receptor) in the sample, and(4) a method of making a dendrimer/polypeptide complex.

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L3: Entry 158 of 173

File: DWPI

Jun 2, 2005

DERWENT-ACC-NO: 1997-052229

DERWENT-WEEK: 200537

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TITLE: Hybrid polypeptide(s) comprising HIV-1 sub-type B immuno:dominant region -
contg. 1 or more specific amino acid substitutions critical for detecting HIV-1
sub-type O, useful in immunoassay for detecting HIV antibodies

INVENTOR: BRIDON, P; COLPITTS, L ; DAGHFAL, J ; JAFFE, D ; SZE, S - ; BRIDON, D P ;
COLPITTS, T L ; DAGHFAL, D J ; JAFFE, K D ; SZE, I S

PATENT-ASSIGNEE: ABBOTT LAB (ABBO)

PRIORITY-DATA: 1995US-0472597 (June 7, 1995), 1997US-0837732 (April 22, 1997)

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PATENT-FAMILY:

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<input type="checkbox"/> WO 9640763 A2	December 19, 1996	E	034	C07K014/16
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<input type="checkbox"/> US 5624797 A	April 29, 1997		000	C12Q001/70
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<input type="checkbox"/> JP 11507635 W	July 6, 1999		037	C07K014/16
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<input type="checkbox"/> DE 69632535 E	June 24, 2004		000	C07K014/16
<input type="checkbox"/> ES 2220982 T3	December 16, 2004		000	C07K014/16

DESIGNATED-STATES: CA JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BE CH
DE ES FR GB IT LI BE CH DE ES FR GB IT LI

CITED-DOCUMENTS:1.Jnl.Ref; DE 4405810 ; EP 591914 ; EP 727483 ; WO 9007119

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
DE 69632535T2	June 7, 1996	1996DE-0632535	
DE 69632535T2	June 7, 1996	1996EP-0921412	
DE 69632535T2	June 7, 1996	1996WO-US09655	

DE 69632535T2		EP 832113	Based on
DE 69632535T2		WO 9640763	Based on
WO 9640763A2	June 7, 1996	1996WO-US09655	
WO 9640763A3	June 7, 1996	1996WO-US09655	
US 5624797A	June 7, 1995	1995US-0472597	
EP 832113A2	June 7, 1996	1996EP-0921412	
EP 832113A2	June 7, 1996	1996WO-US09655	
EP 832113A2		WO 9640763	Based on
US 5800983A	June 7, 1995	1995US-0472597	Cont of
US 5800983A	April 22, 1997	1997US-0837732	
JP 11507635W	June 7, 1996	1996WO-US09655	
JP 11507635W	June 7, 1996	1997JP-0501929	
JP 11507635W		WO 9640763	Based on
EP 832113B1	June 7, 1996	1996EP-0921412	
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EP 832113B1		WO 9640763	Based on
DE 69632535E	June 7, 1996	1996DE-0632535	
DE 69632535E	June 7, 1996	1996EP-0921412	
DE 69632535E	June 7, 1996	1996WO-US09655	
DE 69632535E		EP 832113	Based on
DE 69632535E		WO 9640763	Based on
ES 2220982T3	June 7, 1996	1996EP-0921412	
ES 2220982T3		EP 832113	Based on

INT-CL (IPC): C07 K 14/16; C12 Q 1/70; G01 N 33/569; G01 N 33/68

ABSTRACTED-PUB-NO: US 5624797A

BASIC-ABSTRACT:

Polypeptide having a point mutation in the HIV-1 sub-type B immunodominant region (IDR) at position 604 and/or 610, is claimed. Also claimed are: (1) immunoassay to detect the pressure of HIV antibodies in a test sample, comprising: (a) contacting the test sample with a solid phase to which a HIV-1 polypeptide having a point mutation between positions 593 and 611 has been attached, to form a 1st mixt., and incubating the 1st mixt. for a time and under conditions sufficient to form polypeptide/antibody complexes; (b) contacting the complexes with an indicator reagent comprising a member of a specific binding pair attached to signal generating cpd. capable of generating a measurable signal, to form a 2nd mixt., and incubating the 2nd mixt. for a time and under conditions sufficient to form polypeptide/antibody/indicator reagent complexes; and (c) determining the presence of HIV antibodies in the test sample by detecting the measurable signal; and (2) an immunoassay for detecting HIV antibody in test sample, comprising contacting the test sample with a HIV-1, polypeptide and detecting the presence of the antibody, where the improvement comprises utilising a polypeptide having at least 1 point mutation between positions 593 and 611 of the HIV-1 gp 160 sequence.

USE - The polypeptides which are hybrid polypeptides comprising the gp41 IDR or HIV-1 sub-type B contg. 1 or more specific amino acid substitutions critical for the detection of HIV-1 sub-type O, can be used for the detection of HIV antibodies (kit provided).

The hybrid polypeptides are capable of reacting with the anti-HIV-1 sub-type O

antibodies present in a panel of confirmed HIV-1 sub-type O test samples, some of which were not reactive when the unmodified sub-type B sequence was used.

ABSTRACTED-PUB-NO: US 5800983A

EQUIVALENT-ABSTRACTS:

An immunoassay to detect the presence of HIV antibodies in a test sample, comprising:

a) contacting said test sample with a solid phase to which has been attached an HIV-1 polypeptide having a point mutation between positions 593 and 611 to form a first mixture, and incubating said first mixture for a time and for conditions sufficient to form polypeptide/antibody complexes;

b) contacting said polypeptide/antibody complexes with an indicator reagent comprising a member of a specific binding pair attached to a signal generating compound capable of generating a measureable signal to form a second mixture, and incubating said second mixture for a time and for conditions sufficient to form polypeptide/antibody/indicator reagent complexes; and

c) determining the presence of HIV antibodies in said test sample by detecting the measureable signal.

Polypeptide having a point mutation in the HIV-1 sub-type B immunodominant region (IDR) at position 604 and/or 610, is claimed. Also claimed are: (1) immunoassay to detect the pressure of HIV antibodies in a test sample, comprising: (a) contacting the test sample with a solid phase to which a HIV-1 polypeptide having a point mutation between positions 593 and 611 has been attached, to form a 1st mixt., and incubating the 1st mixt. for a time and under conditions sufficient to form polypeptide/antibody complexes; (b) contacting the complexes with an indicator reagent comprising a member of a specific binding pair attached to signal generating cpd. capable of generating a measurable signal, to form a 2nd mixt., and incubating the 2nd mixt. for a time and under conditions sufficient to form polypeptide/antibody/indicator reagent complexes; and (c) determining the presence of HIV antibodies in the test sample by detecting te measurable signal; and (2) an immunoassay for detecting HIV antibody in test sample, comprising contacting the test sample with a HIV-1, polypeptide and detecting the presence of the antibody, where the improvement comprises utilising a polypeptide having at least 1 point mutation between positions 593 and 611 of the HIV-1 gp 160 sequence.

USE - The polypeptides which are hybrid polypeptides comprising the gp41 IDR or HIV-1 sub-type B contg. 1 or more specific amino acid substitutions critical for the detection of HIV-1 sub-type O, can be used for the detection of HIV antibodies (kit provided).

The hybrid polypeptides are capable of reacting with the anti-HIV-1 sub-type O antibodies present in a panel of confirmed HIV-1 sub-type O test samples, some of which were not reactive when the unmodified sub-type B sequence was used.

WO 9640763A

CHOSEN-DRAWING: Dwg.1/5

DERWENT-CLASS: A96 B04 D16 J04 S03

CPI-CODES: A12-V03C2; B04-C01G; B04-G08; B04-N04; B11-C07A; B12-K04A4; D05-H06; J04-B01B;

EPI-CODES: S03-E14H;

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁵ : C12N 15/19, C12P 21/02, C07K 13/00, A61K 37/02, C12N 1/21, 5/10	A2	(11) International Publication Number: WO 94/13808 (43) International Publication Date: 23 June 1994 (23.06.94)
(21) International Application Number: PCT/US93/11669 (22) International Filing Date: 2 December 1993 (02.12.93) (30) Priority Data: 07/990,304 4 December 1992 (04.12.92) US (71) Applicants: BIOGEN, INC. [US/US]; 14 Cambridge Center, Cambridge, MA 02142 (US). THE REGENTS OF THE UNIVERSITY OF CALIFORNIA [US/US]; 300 Lakeside Drive, 22nd floor, Oakland, CA 94612-3550 (US). (72) Inventors: BROWNING, Jeffrey; 32 Milton Road, Brookline, MA 02146 (US). WARE, Carl, F.; 7841 Golden Star, Riverside, CA 92506 (US). (74) Agents: HALEY, James, F., Jr. et al.; Fish & Neave, 1251 Avenue of the Americas, New York, NY 10020 (US).		(81) Designated States: AU, CA, JP, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>Without international search report and to be republished upon receipt of that report.</i>
(54) Title: LYMPHOTOXIN- β , LYMPHOTOXIN- β COMPLEXES, PHARMACEUTICAL PREPARATIONS AND THERAPEUTIC USES THEREOF (57) Abstract This invention relates to lymphotoxin- β , a lymphocyte membrane type protein. This protein is found on the surface of a number of cells, including phorbol ester (PMA) stimulated T cell hybridoma II-23.D7 cells. This invention also relates to complexes formed between lymphotoxin- β and other peptides such as lymphotoxin- α and to complexes comprising multiple subunits of lymphotoxin- β . These proteins and complexes are useful in holding LT- α formed within the cell on the cell surface where the LT- α /LT- β complex may act as an inflammation regulating agent, a tumor growth inhibiting agent, a T cell inhibiting agent, a T cell activating agent, an autoimmune disease regulating agent, or an HIV inhibiting agent. Furthermore, the antitumor activity of the LT- α /LT- β complex may be delivered to tumor cells by tumor infiltrating lymphocytes (TILs) transfected with the gene for LT- β .		

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L3: Entry 161 of 173

File: DWPI

May 13, 2004

DERWENT-ACC-NO: 1994-217884

DERWENT-WEEK: 200432

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TITLE: Lymphotoxin-beta, soluble forms and complexes - are useful for holding lymphotoxin-alpha on cell surfaces, for use as e.g. antiinflammatory agent for lessening severity of effects of HIV- infection, neoplasia, inflammation

INVENTOR: BROWNING, J; WARE, C F ; BROWNING, J L

PRIORITY-DATA: 1992US-0990304 (December 4, 1992), 1990US-0544862 (June 27, 1990), 1991WO-US04588 (June 27, 1991), 1994US-0222614 (April 1, 1994), 1995US-0466254 (June 6, 1995), 2001US-0040281 (November 7, 2001)

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PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> JP 2004135676 A	May 13, 2004		058	C12N015/09
<input type="checkbox"/> WO 9413808 A2	June 23, 1994	E	111	C12N015/19
<input type="checkbox"/> AU 9460483 A	July 4, 1994		000	C12N015/19
<input type="checkbox"/> WO 9413808 A3	August 4, 1994		000	
<input type="checkbox"/> EP 672143 A1	September 20, 1995	E	000	C12N015/19
<input type="checkbox"/> JP 08507201 W	August 6, 1996		101	C12N015/09
<input type="checkbox"/> AU 692146 B	June 4, 1998		000	C07K013/00
<input type="checkbox"/> US 20030143210 A1	July 31, 2003		000	A61K048/00

INT-CL (IPC): A61K 37/02; A61K 38/00; A61K 39/395; A61K 48/00; C07H 21/04; C07K 13/00; C07K 14/47; C07K 14/705; C07K 14/715; C07K 19/00; C12N 1/21; C12N 5/08; C12N 5/10; C12N 15/09; C12N 15/19; C12P 21/02; C12P 21/02; C12R 1/91

ABSTRACTED-PUB-NO: WO 9413808A

BASIC-ABSTRACT:

Lymphotoxin (LT)-beta, a lymphocyte membrane-type polypeptide, comprises the 241 aminoacid sequence given in the specification.

Also claimed is engineered LT-beta with the sequence Leu-Gly-Leu cleared from the 5' end and replaced by a single Met or Leu; a sol. LT-beta peptide comprising the LT-beta sequence truncated at a position between amino acids 41-92. DNA encoding any of the LT. beta peptides and derivs., a polypeptide complex comprising the LT-beta polypeptide of sol. LT-beta peptide, and a 2nd polypeptide selected from LT-alpha, native human or animal LT, recombinant LT sol. LT, secreted LT, or LT or

active fragments; and a method for producing LT epitopes on cell surfaces, by transfecting the cell with DNA encoding LT-beta or sol. LT-beta.

USE - The LT-beta polypeptide or sol. LT-beta peptide, is useful in a compsn. (claimed) for preventing, treating or lessening the advancement, severity of effects of HIV- infection, neoplasia, inflammation or inflammatory disease, or autoimmune disease (claimed). It can be used to suppress the immune system (claimed) and enhance targetting tumoricidal activity of tumour infiltrating lymphocytes.

ABSTRACTED-PUB-NO: WO 9413808A

EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.0/16

[Previous Doc](#) [Next Doc](#) [Go to Doc#](#)

DOCUMENT-IDENTIFIER: US 6313263 B1

TITLE: .gamma., .delta. T cell receptor and methods for detection

Abstract Text (1):

The present invention provides purified polypeptides which comprise at least a portion of a .delta. T cell receptor polypeptide, a .gamma. T cell receptor polypeptide, a .gamma., .delta. T cell receptor complex or a .gamma., .gamma. T cell receptor complex. Substances capable of forming complexes with these polypeptides are also provided. Additionally, methods for detecting T cells which have within them or on their surfaces a polypeptide of the present invention are provided. Moreover, methods for diagnosing immune system abnormalities are provided which comprise measuring in a sample from a subject the number of T cells which have within them or on their surfaces a polypeptide of the present invention.

Previous Doc



US006313263B1

(12) United States Patent
Brenner et al.**(10) Patent No.: US 6,313,263 B1**
(45) Date of Patent: Nov. 6, 2001**(54) γ , δ T CELL RECEPTOR AND METHODS FOR DETECTION****(75) Inventors:** Michael B. Brenner, Ashland; Jack L. Strominger, Lexington; Johnathan Seldman, Milton; Stephen H. Ip, Framingham; Michael S. Krangel, Newtonville, all of MA (US)**(73) Assignees:** Astra AB, Sodertalje (SE); President and Fellows of Harvard College, Cambridge; Dana-Farber Cancer Institute, Boston, both of MA (US)**(*) Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.**(21) Appl. No.: 08/798,574****(22) Filed: Feb. 10, 1997****Related U.S. Application Data****(63)** Continuation of application No. 08/155,978, filed on Nov. 19, 1993, now Pat. No. 5,601,822, which is a continuation of application No. 07/016,252, filed on Feb. 19, 1987, now Pat. No. 5,340,921, which is a continuation-in-part of application No. 06/882,100, filed on Jul. 3, 1986, now abandoned, which is a continuation-in-part of application No. 06/881,825, filed on Jul. 3, 1986, now Pat. No. 5,286,653.**(51) Int. Cl.⁷ A61K 38/00****(52) U.S. Cl. 530/300; 530/350****(58) Field of Search 424/144.1, 134.1, 424/143.1, 178.1; 530/300, 387.1, 388.25, 389.1, 350; 436/500, 548****(56) References Cited****U.S. PATENT DOCUMENTS**

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(List continued on next page.)

Primary Examiner—Laurie Scheiner**(74) Attorney, Agent, or Firm**—Pennie & Edmonds LLP**(57) ABSTRACT**

The present invention provides purified polypeptides which comprise at least a portion of a δ T cell receptor polypeptide, a γ T cell receptor polypeptide, a γ , δ T cell receptor complex or a γ , γ T cell receptor complex. Substances capable of forming complexes with these polypeptides are also provided. Additionally, methods for detecting T cells which have within them or on their surfaces a polypeptide of the present invention are provided. Moreover, methods for diagnosing immune system abnormalities are provided which comprise measuring in a sample from a subject the number of T cells which have within them or on their surfaces a polypeptide of the present invention.

4 Claims, 14 Drawing Sheets-

DOCUMENT-IDENTIFIER: US 6048715 A

TITLE: Two-phase partition affinity separation system and affinity separated cell-containing composition

CLAIMS:

13. A composition comprising:

a fusion polypeptide which comprises a non-catalytic polysaccharide binding peptide and a ligand bound to (1) a phase-forming oligosaccharide polymer and (2) a cell having a receptor for said ligand on its surface to which said ligand binds, wherein said composition is obtained by the method of contacting said fusion polypeptide with said cell to form a complex with said cell and contacting said complex with a two-phase partition system which comprises as a first phase a phase-forming oligosaccharide polymer to which said polysaccharide binding peptide binds with a K_a of $10^{3.3}$ M to $10^{7.7}$ M, and as a second phase a phase separation inducing agent selected from the group consisting of a polyethylene glycol polymer, a dextran, and a copolymer of ethylene oxide and propylene oxide, and a salt at a concentration of at least 3 M, whereby said complex partitions into said first phase by binding to said phase-forming oligosaccharide polymer; and recovering said first phase, whereby said composition is obtained.



US005807695A

United States Patent [19]

Wagner et al.

[11] **Patent Number:** 5,807,695[45] **Date of Patent:** *Sep. 15, 1998**[54] METALLIC CATION BINDING
POLYPEPTIDES AND METHODS
THEREFOR**[75] **Inventors:** Fred W. Wagner, Walton; Dwane E. Wylle, Lincoln, both of Nebr.; Sheldon M. Schuster, Gainesville, Fla.[73] **Assignee:** Board of Regents of University of Nebraska, Lincoln, Nebr.[*] **Notice:** The term of this patent shall not extend beyond the expiration date of Pat. No. 5,503,987.[*] **Notice:** The term of this patent shall not extend beyond the expiration date of Pat. No. 5,639,624.[21] **Appl. No.:** 773,688[22] **Filed:** Dec. 27, 1996**Related U.S. Application Data**

[63] Continuation of Ser. No. 266,163, Jun. 27, 1994, Pat. No. 5,639,624, which is a continuation of Ser. No. 990,542, Dec. 14, 1992, abandoned, which is a continuation of Ser. No. 493,299, Mar. 14, 1990, abandoned, which is a continuation-in-part of Ser. No. 324,392, Mar. 14, 1989, abandoned.

[51] **Int. Cl.⁶** G01N 33/547; G01N 33/84; G01N 33/531; C07K 16/44[52] **U.S. Cl.** 435/7.92; 435/7.1; 436/532; 436/542; 436/543; 436/548; 530/387.1; 530/388.1; 530/388.9; 530/403; 530/404[58] **Field of Search** 435/7.92, 7.1; 436/532, 542, 543, 548; 530/403, 404, 387.1, 388.9, 389.8, 388.1**[56] References Cited****U.S. PATENT DOCUMENTS**

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(List continued on next page.)

Primary Examiner—Michael P. Woodward
Attorney, Agent, or Firm—Merchant, Gould, Smith, Edell, Welter & Schmidt, P.A.

[57] ABSTRACT

The invention is directed to monoclonal antibodies, their fragments, single chains and polypeptide mimics of their hypervariable regions which immunoreact with bare small moieties such as metallic cations and small organic molecules, the hybridomas for production of the monoclonal antibodies, immunogen compounds for developing the hybridomas, and methods for use of the monoclonal antibodies.

21 Claims, 3 Drawing Sheets



US005783383A

United States Patent [19]

Kondo et al.

[11] Patent Number: 5,783,383

[45] Date of Patent: Jul. 21, 1998

[54] METHOD OF DETECTING
CYTOMEGALOVIRUS (CMV)[75] Inventors: Kazuhiro Kondo, Osaka, Japan;
Edward S. Mocarski, Jr., Portola
Valley, Calif.[73] Assignee: The Board of Trustees of the Leland
Stanford Junior University, Stanford,
Calif.

[21] Appl. No.: 450,945

[22] Filed: May 23, 1995

[51] Int. Cl.⁶ C12Q 1/70; C12Q 1/68;
A61K 38/00; C07K 1/00[52] U.S. Cl. 435/5; 435/6; 435/7.1;
435/91.1; 435/91.2; 204/456; 530/300;
530/350; 530/388.1[58] Field of Search 530/300, 350,
530/388.1; 435/5, 6, 7.1, 91.1, 91.2; 204/456

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Myocytes of Patients with HIV-Associated Cardiomyopa-
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Primary Examiner—Ardin H. Marschel

Assistant Examiner—Jezia Riley

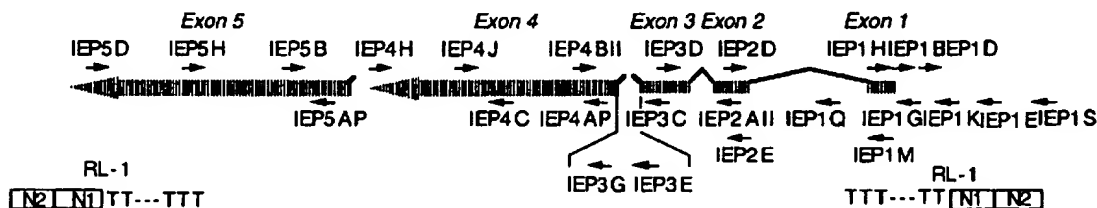
Attorney, Agent, or Firm—Charles K. Sholtz; Peter J.
Dehlinger

[57]

ABSTRACT

The present invention provides methods and compositions relating to cytomegalovirus (CMV) latent transcripts, latency-associated polypeptides and antibodies directed against such polypeptide. The polypeptides are encoded by CMV DNA sequences and are produced specifically during latent infection. Also provided are methods of detecting CMV in a sample, particularly CMV in a latent state. The methods include RT-PCR-based methods and immunodiagnostic methods.

10 Claims, 22 Drawing Sheets



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L3: Entry 85 of 173

File: USPT

Jul 21, 1998

US-PAT-NO: 5783383

DOCUMENT-IDENTIFIER: US 5783383 A

TITLE: Method of detecting cytomegalovirus (CMV)

DATE-ISSUED: July 21, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kondo; Kazuhiro	Osaka			JP
Mocarski, Jr.; Edward S.	Portola Valley	CA		

US-CL-CURRENT: 435/5; 204/456, 435/6, 435/7.1, 435/91.1, 435/91.2, 530/300,
530/350, 530/388.1

CLAIMS:

It is claimed:

1. A method of detecting cytomegalovirus (CMV) in a sample, comprising,

contacting a sample, containing an antibody, with a purified polypeptide (i) encoded by CMV DNA sequences and (ii) produced specifically during latent infection, where said antibody is immunoreactive with said polypeptide, and

detecting the binding of said antibody to said polypeptide, where said detecting indicates the presence of CMV in the sample.

2. A method of claim 1, where said sample is a human serum or plasma sample.

3. A method of detecting cytomegalovirus (CMV) in a sample, comprising,

contacting a sample, containing a polypeptide, with an antibody, where said antibody is immunoreactive with said polypeptide and where said polypeptide is (i) encoded by CMV DNA sequences and (ii) produced specifically during latent infection, and

detecting the binding of said antibody to said polypeptide, where said detecting indicates the presence of CMV in the sample.

4. A method of claim 3, where said contacting further includes fractionating the sample on a gel, transferring the fractionated sample to a membrane, and exposing the membrane to the antibody; and where said detecting further includes detecting the binding of said antibody to said polypeptide on the membrane.

5. A method of claim 3, where said antibody is attached to a solid support, and said detecting is accomplished by addition of a second, reporter antibody that is specifically immunoreactive with said polypeptide.

6. A method of claim 3, where said antibody is attached to a solid support, and said detecting further includes examining the antibody for the presence of polypeptide, where said examining involves reacting the solid support with a polypeptide-reporter complex, where the polypeptide competes with binding of the polypeptide-reporter complex to the antibody, and

detecting polypeptide-reporter complex that is bound to the solid support.

7. A method of claim 3, where said sample is a human tissue sample.

8. A method of claim 7, where said sample is a bone marrow sample.

9. A method of claim 7, where said tissue sample includes hematopoietic stem cells.

10. A method of claim 7, where said tissue sample is a blood sample.

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DOCUMENT-IDENTIFIER: US 5318892 A

TITLE: Method for assaying antibody against Chlamydia trachomatis and diagnostic preparation for chlamydia trachomatis infection

CLAIMS:

5. A method for assaying an antibody against C. trachomatis which comprises the steps of:

(a) fixing on a solid carrier an antigen consisting of a C. trachomatis outer membrane complex consisting essentially of at least three polypeptides having a molecular weight of ca. 75 Kdaltons, ca. 59.5 Kdaltons and ca. 39.5 Kdaltons and a lipid or

an antigen consisting of a mixture of C. trachomatis outer membrane-constituting polypeptides consisting essentially of at least three polypeptides having a molecular weight of ca. 75 Kdaltons, ca. 59.5 Kdaltons and ca. 39.5 Kdaltons,

(b) contacting said solid carrier with a test specimen suspected of containing an antibody against C. trachomatis,

(c) removing unreacted components of said test specimen,

(d) contacting the thus formed antigen-antibody complexes consisting essentially of the C. trachomatis outer membrane antigen and the antibody against C. trachomatis with a labeled antibody against the antibody originating from said test specimen,

(e) removing the unreacted portion of said labeled antibody, and

(f) measuring a quantity of the labeling substance bound on said labeled antibody to determine the presence or quantity of the antibody against C. trachomatis in the test specimen.

10. A diagnostic preparation for C. trachomatis infection which comprises an antigen consisting of a C. trachomatis outer membrane complex consisting essentially of at least three polypeptides having a molecular weight of ca. 75 Kdaltons, ca. 59.5 Kdaltons and ca. 39.5 Kdaltons and a lipid, or an antigen consisting of a mixture of C. trachomatis outer membrane-constituting polypeptides consisting essentially of at least three polypeptides having a molecular weight of ca. 75 Kdaltons, ca. 59.5 Kdaltons and ca. 39.5 Kdaltons fixed on a solid carrier.

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[First Hit](#)

**Generate Collection**

L3: Entry 19 of 173

File: PGPB

Oct 28, 2004

DOCUMENT-IDENTIFIER: US 20040213781 A1
TITLE: Polypeptides with Fc binding ability

CLAIMS:

67. A method for testing a compound for its ability to act as an antagonist of Fc receptor comprising: a) producing a recombinant soluble polypeptide with Fc binding ability, wherein said recombinant soluble polypeptide comprises: i) an Ig binding domain of said Fc receptor or a fragment thereof; and ii) a spacer for spacing said recombinant soluble polypeptide from a solid surface; b) contacting said compound with said recombinant soluble polypeptide; c) contacting a mixture of said compound and said recombinant soluble polypeptide with an immune complex; d) measuring the degree to which said compound inhibits binding of said immune complex to said recombinant soluble polypeptide in (c); and e) identifying the compound which inhibits binding of said recombinant soluble polypeptide with said immune complex as an antagonist of said Fc receptor.

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(12) **Patent Application Publication**
Hogarth et al.

(43) **Pub. Date:** **Oct. 28, 2004**

cation No. PCT/AU95/00606, filed on Sep. 15, 1995, which is a continuation-in-part of application No. 08/332,562, filed on Oct. 31, 1994, now Pat. No. 5,985,599.

(30) **Foreign Application Priority Data**

Sep. 16, 1994 (AU)..... PM 8232

Publication Classification

(51) **Int. Cl.⁷** **G01N 33/567; C07H 21/04;**
A61K 39/395; C07K 14/705
(52) **U.S. Cl.** **424/143.1; 530/350; 435/69.1;**
435/320.1; 435/325; 536/23.5

(21) Appl. No.: 10/632,687

(57) **ABSTRACT**

(22) Filed: Jul. 31, 2003

Related U.S. Application Data

(60) Continuation of application No. 09/633,147, filed on Aug. 4, 2000, now abandoned, which is a division of application No. 08/809,105, filed on May 23, 1997, now abandoned, filed as 371 of international appli-

The present invention generally relates to molecules having Fc binding ability such as those with Fc receptor-like activity. The present invention also relates to the molecules, nucleic acids encoding the molecules, antagonist compounds, pharmaceutical compositions comprising the molecules and compounds, methods for testing potential antagonists, methods for producing the polypeptides, methods of treatment of disease and other aspects.



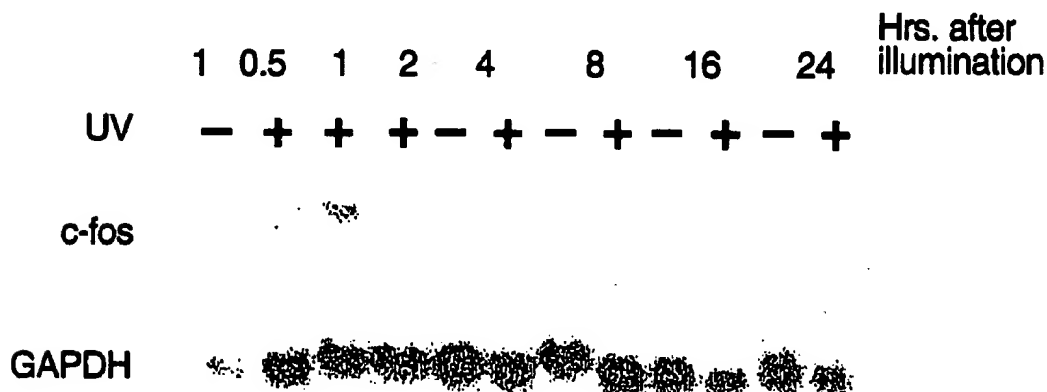
US 20040185485A1

(19) **United States**(12) **Patent Application Publication**
Blumenberg(10) **Pub. No.: US 2004/0185485 A1**(43) **Pub. Date: Sep. 23, 2004**(54) **GENE MARKERS USEFUL FOR DETECTING
SKIN DAMAGE IN RESPONSE TO
ULTRAVIOLET RADIATION**(60) Provisional application No. 60/231,454, filed on Sep.
8, 2000.**Publication Classification**(75) **Inventor: Miroslav Blumenberg, New York, NY
(US)**(51) **Int. Cl.⁷ C12Q 1/68**(52) **U.S. Cl. 435/6**

Correspondence Address:

**WILMER CUTLER PICKERING HALE AND
DORR LLP
60 STATE STREET
BOSTON, MA 02109 (US)**(57) **ABSTRACT**

The cellular response to ultraviolet radiation exposure has been characterized on the molecular level through the use of high density gene array technology. Nucleic acid molecules and protein molecules, the expression of which are repressed or induced in response to ultraviolet radiation exposure, are identified according to a temporal pattern of altered expression post ultraviolet radiation exposure. Methods are disclosed that utilized these ultraviolet radiation-regulated molecules as markers for ultraviolet radiation exposure. Other screening methods of the invention are designed for the identification of compounds that modulate the response of a cell to ultraviolet radiation exposure. The invention also provides compositions useful for drug screening or pharmaceutical purposes.

(73) **Assignee: New York University, New York, NY
(US)**(21) **Appl. No.: 10/775,875**(22) **Filed: Feb. 10, 2004****Related U.S. Application Data**(62) **Division of application No. 09/947,870, filed on Sep.
6, 2001.**

16. A polypeptide complex comprising a first polypeptide selected from a group consisting of the amino acid sequence defined by any one of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, a polypeptide according to claim 8, and soluble lymphotoxin-.beta. peptide according to claim 4(c), and a second polypeptide selected from the group consisting of lymphotoxin-.alpha., native human or animal lymphotoxin, recombinant lymphotoxin, soluble lymphotoxin, secreted lymphotoxin, or lymphotoxin or lymphotoxin-active fragments of any of the above.

17. A polypeptide complex comprising a plurality of lymphotoxin-.beta. polypeptide units.

18. A polypeptide complex according to claim 16 wherein the complex is associated with a cell surface.

19. A polypeptide complex according to claim 18 wherein the first polypeptide is associated with the surface of OKT3-stimulated primary T cells, antigen-specific IL-2 dependent CTL clones, and a PMA-stimulated non-lymphotoxin human T cell hybridoma, II-23.D7.



US 20030017519A1

(19) **United States**(12) **Patent Application Publication****Brown et al.**(10) **Pub. No.: US 2003/0017519 A1**(43) **Pub. Date: Jan. 23, 2003**(54) **ELECTROCHEMICAL ENZYME ASSAY**

(76) **Inventors:** Mary E. Brown, Indianapolis, IN (US); Harvev B. Buck JR., Indianapolis, IN (US); Hans-Joachim Guder, Grunstadt (DE); John G.R. Hurrell, Carmel, IN (US); Lance S. Kuhn, Fishers, IN (US); Robert J. McEnroe, Noblesville, IN (US); Rebecca W. Muddlman, Indianapolis, IN (US); Mary Luann Ochs, Fishers, IN (US)

now Pat. No. 6,110,696, which is a continuation-in-part of application No. 08/113,548, filed on Aug. 27, 1993, now Pat. No. 5,427,912.

Publication Classification

(51) **Int. Cl.⁷** G01N 33/53; G01N 33/537; G01N 33/543; C12Q 1/26

(52) **U.S. Cl.** 435/7.92; 435/25

(57) **ABSTRACT**

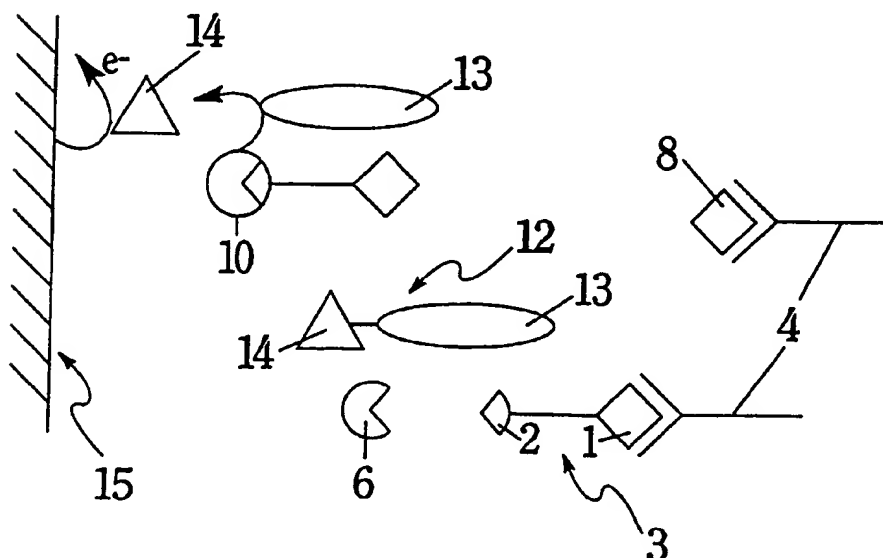
A diagnostic kit, method, and apparatus for electrochemically determining the presence or concentration of an analyte in a sample. A mixture is formed which includes the sample, an enzyme acceptor polypeptide, an enzyme donor polypeptide, and a labeled substrate. The enzyme donor polypeptide is capable of combining with the enzyme acceptor polypeptide to form an active enzyme complex. The formation of such the active enzyme complex is responsive to the presence or concentration of the analyte in the fluid sample. The active enzyme hydrolyzes the labeled substrate, resulting in the generation of an electroactive label, which can then be oxidized at the surface of an electrode. A current resulting from the oxidation of the electroactive compound can be measured and correlated to the concentration of the analyte in the sample.

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(21) **Appl. No.:** 10/090,141(22) **Filed:** Feb. 27, 2002**Related U.S. Application Data**

(60) Continuation of application No. 09/547,289, filed on Apr. 11, 2000, now abandoned, which is a division of application No. 08/494,668, filed on Jun. 26, 1995,



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L3: Entry 164 of 173

File: DWPI

Dec 17, 1991

DERWENT-ACC-NO: 1992-016196

DERWENT-WEEK: 199202

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TITLE: Compsn. for enhancing glucose uptake in mammalian cells - comprises peptide sequence of polymorphic region of class I major histocompatibility complex antigen

Basic Abstract Text (1):

Compsn (I) comprises a polypeptide sequence of a polymorphic region of a class I major histocompatibility complex (MHC) antigen, the polypeptide sequence consisting of at least 8 aminoacids in sequence of the sequence (A); joined covalently to a cpd (B) which binds to the binding site of a receptor (R): E-R-E-T-Q-I-A-K-G-N-E-Q-S-F-R-V-D- K-R-T-K-K-R-Y-Y (A) The 8 aminoacid sequence has either R-Y or R-Y-Y at the C-terminus, and binds to other than the ligand binding site of a mammalian naturally occuring surface membrane receptor (R), which is either for insulin or epidermal growth factor. Binding results in a change in conformation of the receptor.

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12538140 PMID: 10487205

The stress-activated protein kinase pathways.

Tibbles L A; Woodgett J R

Division of Experimental Therapeutics, Ontario Cancer Institute, Toronto, Canada.

Cellular and molecular life sciences - CMLS (SWITZERLAND) Aug 15 1999, 55 (10) p1230-54, ISSN 1420-682X--Print Journal Code: 9705402

Publishing Model Print

Document type: Journal Article; Review

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

Part of the cellular response to toxins, physical stresses and inflammatory cytokines occurs by signalling via the stress-activated protein kinase (SAPK) and p38 reactivating kinase pathways. This results in modification of cellular gene expression. These stress-responsive kinase pathways are structurally similar, but functionally distinct, from the archetypal mitogen-activated protein **kinases** (**MAPKs** or ERKs). The ERK **pathway** is a hierarchical cascade originating at the cell membrane with receptors for mitogens or growth factors, which recruit, via adapter proteins and exchange factors, the small guanosine triphosphatase (GTPase) **Ras** (see fig. 1). **Ras** activates **raf**, a serine threonine kinase, which activates MEK (MAPK/ERK kinase). MEK, in turn, phosphorylates and activates ERK1 and ERK2, which translocate to the nucleus and transactivate transcription factors, changing gene expression to promote growth, differentiation or mitosis. By transducing signals through a cascade of kinases, several options for control are introduced for amplifying and/or modifying the output signal. The SAPK and p38 pathways are also hierarchically arranged, but less is known about the upstream components and the downstream effects of stimulation of these pathways. Among the processes modulated by stress-responsive pathways are apoptosis, transformation, development, immune activation, inflammation and adaptation to environmental changes. This **review** outlines the upstream componentry of these pathways that interact with a variety of agonists to modify the activity of SAPK and p38, and explores the downstream functions of this activation. (373 Refs.)

Descriptors: *Ca(2+)-Calmodulin Dependent Pr

14003072 PMID: 12421735

Therapeutics targeting signal transduction for patients with colorectal carcinoma.

de Bono Johann S; Rowinsky Eric K

Institute for Drug Development, Cancer Therapy and Research Center, 7979 Wurzbach Road, 4th Floor Zeller Building, San Antonio, TX 78229, USA.

British medical bulletin (England) 2002, 64 p227-54, ISSN 0007-1420

--Print Journal Code: 0376542

Publishing Model Print

Document type: Journal Article; Review

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

The cytotoxics developed for the treatment of patients with advanced colorectal cancer have yielded diminishing returns. Agents aimed at novel molecular targets are required to improve the prognosis of this disease. This **review** describes the most recent advances in the clinical development of therapies designed to block the function of several important signalling cellular proteins. Therapies discussed include agents targeting: (i) the epidermal growth factor receptor (EGFR) family; (ii) **Ras** via the inhibition of farnesyltransferase; (iii) **Raf** kinase; (iv) the mitogen-activated protein **kinase pathway** (**MAPK**, MEK, Erk); (v) Akt; and (vi) the apoptosis signalling pathways including NF-kappaB, Bcl-2 and the TRAIL receptor. The results of clinical trials of the first generation of such therapeutics to enter clinical evaluation in malignant diseases are presented. Potential advantages and disadvantages of these different therapeutic modalities are discussed and future challenges for the evaluation of these targeted agents in the clinic is presented. (59 Refs.)

Descriptors: *Antineoplastic Agents--therapeutic use--TU; *Colorectal Neoplasms--therapy--TH; *Signal Transduction--drug effects--DE; Animals; Antibodies, Monoclonal--therapeutic use--TU; Apoptosis--drug effects--DE; Enzyme Inhibitors--therapeutic use--TU; Genes, **ras**; Humans; MAP Kinase Signaling System--drug effects--DE; Mice; Proto-Oncogene Proteins c- **raf** --genetics--GE; Randomized Controlled Trials; Receptor, Epidermal Growth Factor--immunology--IM; Research Support, Non-U.S. Gov't; Research Support, U.S. Gov't, P.H.S.

CAS Registry No.: 0

(Proto-Oncogene Proteins A- **raf**); EC 2.7.1.37 (Proto-Oncogene Proteins
B- **raf**); EC 2.7.1.37 (Proto-Oncogene Proteins c- **raf**); EC 2.7.1.37 (**raf** Kinases)
Record Date Created: 20050919
Record Date Completed: 20051027

5434122 PMID: 15853648

Progress towards therapeutic small molecule MEK inhibitors for use in cancer therapy.

Wallace Eli M; Lyssikatos Joseph P; Yeh Tammie; Winkler James D; Koch Kevin

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Current topics in medicinal chemistry (Netherlands) 2005, 5 (2)
p215-29, ISSN 1568-0266--Print Journal Code: 101119673

Publishing Model Print

Document type: Journal Article; Review

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

This paper **reviews** recent progress in the design and evaluation of MEK inhibitors as cancer therapeutics. Activation of the **Ras** / **Raf** / MEK / **MAP kinase pathway** has been implicated in uncontrolled cell proliferation and tumor growth. Mutated, oncogenic forms of **Ras** are found in 50% of colon, 90% of pancreatic and 30% of lung cancers. Recently, B-**Raf** mutations have been identified in more than 60% of malignant melanomas and from 40-70% of papillary thyroid cancers. MEK, a dual specificity kinase, is a key player in this pathway; it is downstream of both **Ras** and **Raf** and activates ERK1/2 through phosphorylation of key tyrosine and threonine residues. Representative examples of both ATP competitive and non-competitive inhibitors as well as natural product based inhibitors will be discussed. (63 Refs.)

Descriptors: *Antineoplastic Agents--pharmacology--PD; *Enzyme Inhibitors--pharmacology--PD; *MAP Kinase Kinase Kinases--antagonists and inhibitors--AI; *Neoplasms--drug therapy--DT; Animals; Antineoplastic Agents--chemistry--CH; Biological Factors; Enzyme Inhibitors--chemistry--CH; Humans; Neoplasms--physiopathology--PP; Signal Transduction--drug effects--DE

CAS Registry No.: 0 (Antineoplastic Agents); 0 (Biological Factors); 0 (Enzyme Inhibitors)

Enzyme No.: EC 2.7.1.37 (MAP Kinase Kinase Kinases)

Record Date Created: 20050427

Record Date Completed: 20050608

12167726 PMID: 10582339

Early signaling pathways activated by c-Kit in hematopoietic cells.

Linnekin D

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Research and Development Center, MD 21702-1201, USA.
dlinnekin@mail.ncifcrf.gov

international journal of biochemistry & cell biology (ENGLAND) Oct 1999
, 31 (10) p1053-74, ISSN 1357-2725--Print Journal Code: 9508482

Publishing Model Print

Document type: Journal Article; Review

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

c-Kit is a receptor tyrosine kinase that binds stem cell factor (SCF). Structurally, c-Kit contains five immunoglobulin-like domains extracellularly and a catalytic domain divided into two regions by a 77 amino acid insert intracellularly. Studies in white spotting and steel mice have shown that functional SCF and c-Kit are critical in the survival and development of stem cells involved in hematopoiesis, pigmentation and reproduction. Mutations in c-Kit are associated with a variety of human diseases. Interaction of SCF with c-Kit rapidly induces receptor dimerization and increases in autophosphorylation activity. Downstream of c-Kit, multiple signal transduction components are activated, including phosphatidylinositol-3-kinase, Src family members, the JAK/STAT **pathway** and the **Ras - Raf - MAP kinase** cascade. Structure-function studies have begun to address the role of these signaling components in SCF-mediated responses. This **review** will focus on the biochemical mechanism of action of SCF in hematopoietic cells. (171 Refs.)

Descriptors: *Hematopoietic Stem Cells--metabolism--ME; *Proto-Oncogene Proteins c-kit--metabolism--ME; *Signal Transduction; *Stem Cell Factor --metabolism--ME; 1-Phosphatidylinositol 3-Kinase--metabolism--ME; Animals; DNA-Binding Proteins--metabolism--ME; Dimerization; Humans; Mice; Mitogen-Activated Protein Kinases--metabolism--ME; Phosphorylation; Protein-Tyrosine Kinase--metabolism--ME; Proto-Oncogene Proteins c-**raf** --metabolism--ME; STAT1 Transcription Factor; Structure-Activity Relationship; Trans-Activators--metabolism--ME; **ras** Proteins--metabolism --ME

13041879 PMID: 11426644

Development of anticancer drugs targeting the MAP kinase pathway .

Sebolt-Leopold J S

Pfizer Global Research and Development, Ann Arbor Laboratories, Michigan 48105, USA.

Oncogene (England) Dec 27 2000, 19 (56) p6594-9, ISSN 0950-9232--
Print Journal Code: 8711562

Publishing Model Print

Document type: Journal Article; Review

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS; Toxbib

Since the discovery of the role of **ras** oncogenes in tumorigenesis, we have witnessed an explosion of research in the signal transduction area. In the quest to understand how **Ras** transmits extracellular growth signals, the **MAP kinase (1MAPK) pathway** has emerged as the crucial route between membrane-bound **Ras** and the nucleus. The MAPK pathway encompasses a cascade of phosphorylation events involving three key kinases, namely **Raf**, MEK (MAP kinase kinase) and ERK (MAP kinase). This kinase cascade presents novel opportunities for the development of new cancer therapies designed to be less toxic than conventional chemotherapeutic drugs. Furthermore, as a signal transduction-based approach to cancer treatment, inhibition of any one of these targets has the potential for translational pharmacodynamic evaluation of target suppression. The rationale for targeting the **MAP kinase pathway** will be **reviewed** here along with a discussion of various pharmacological approaches and the promise they hold for a new generation of anticancer drugs. (70 Refs.)

Descriptors: *Antineoplastic Agents--therape